04 NOV 1991

ASEPA Peter H. → Mike Lee

StarKist SAMOA, Inc.

P.O. BOX 368 • PAGO PAGO • AMERICAN SAMOA 96799

October 30, 1991

Mr. Norman Lovelace
OPINAP - E4
US Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105

Mr. Pati Faiai
American Samoa Environmental Quality
Commission
Office of the Governor
American Samoa Government
Pago Pago, American Samoa 96799

Gentlemen:

Re: Corrective Actions on 1991 DMR-QA Program for Permittee AS0000019 - StarKist Samoa Inc.

This report is prepared in response to the DMR-QA Study 011 results and contains the corrective actions undertaken by the permittee for the following analytes:

1. Lead and Nickel. The metal analyses have been performed by Brewer Environmental Industries under subcontract to Aecos Lab in Honolulu. A letter from Brewer is enclosed. Aecos will be performing all metal analyses in the future.

2. Oil and Grease. The discrepancy in the oil & grease result was due to misplacement of the decimal point by Aecos Lab. The test result should have been reported as 18.750 instead of 18750.

3. 5-day BOD. This analysis was done by StarKist Samoa's own lab. Corrective actions are detailed in the attached memorandum from Tini Lam Yuen (lab supervisor) to Norman Wei.

Sincerely,

STARKIST SAMOA, INC.

MAURICE W. CALLAGHAN
General Manager

cc: N. Wei
R. Ward

BREWER
ENVIRONMENTAL
INDUSTRIES, INC.
a C Mill Wi II company

Environmental Services Division

October 11, 1991

Ms. Erlinda Rauto
AECOS, INC.
970 N. Kalaheo Ave., Suite C311
Kailua, Hawaii 96734

Dear Ms. Rauto:

In regards to the NOT ACCEPTABLE results of DMR-QA Study #11, we have reviewed and rechecked all data available for these analyses and have not found any discrepancies in calculations and reporting in the analyses of Aluminum, Lead, and Nickel as reported.

Corrective action taken include rechecking of all data, procedures, standards solutions and calibrations. We hope these processes will correct any possible problems.

If you have any question please call me at 964-5522.

Thank You!

Sincerely,

Bunji Fujimoto
Inorganic Section Leader

TO: Norman Wei DATE: 10/16/91

FROM: Tini Lam Yuen SUBJECT: Response to DMR - QA BOD Result Study No. 011

In response to DMR - QA BOD Result Study No. 011 I have reviewed our techniques, calculations, etc. using US EPA's check list. My findings/observations are summarized below.

1. Check BOD Methods (if EPA approved).

   a. Method being used is EPA approved, specifically, we are using the iodometric method.

      We recently received a dissolved oxygen (DO) meter (YSI Model 50B) for which we are currently testing our techniques and methodology using the Electrode Membrane Method. We feel the use of this method will greatly simplify BOD analysis. Less time will be spent on reagent preparation, titrations, etc. because we will be reading DO directly out of BOD bottles that will be incubated. Calibration for the equipment is simple and will take less than 5 minutes.

   b. Performance of BOD method is in accordance with given procedures.

2. Check BOD Analysis Calculations (for errors).

   Calculations have been re-checked, units were given as specified, and a colleague double checked calculations.

3. Check Titrating Reagents

   Sodium thiosulfate solution was standardized.

4. Check Instrument (used in the analysis).

   a. The Mettler Analytical balance was calibrated.
   b. pH electrode was functional and Orion pH meter was calibrated.

5. Check Reagent Standards

   a. Standard solutions were renewed. These included phosphate buffer, magnesium sulfate, calcium chloride, ferric chloride (all used in the preparation of the dilution water), manganous sulfate, alkali-iodide-asize, and starch solutions.
   b. Independent QC sample was not analyzed.
      Corrective Action: We have recently received the first batch of performance samples from Environmental Resource Associates Arvada, CO. These samples (which include BOD samples) will be analyzed on a bimonthly basis.

6. Check Data Transcription Errors

This has been done and no errors were found.

7. Check Laboratory Pure Water

Water still is cleaned on a monthly basis. Water filters changed as needed.

8. Check to Determine that Personnel are Properly Trained to Perform this Analysis.

Lab technicians are adequately trained, but further, training is needed to improve their analysis of BOD.
Corrective Action: We have proposed to management that the Lab Supervisor be sent off-island for training in BOD analysis, with reference to membrane electrode method, and to take a short course on "quality assurance for the laboratory" sponsored by the Association of Official Analytical Chemists (AOAC). A special training for laboratory technicians will be held to improve their analytical techniques, etc., afterwards.

cc: M. Loob
M. Callaghan

TLY/pat